



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/750,395

12/30/2003

Vasudevan Srinivasan

42P18068

8966

8791

7590

03/20/2009

BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP  
1279 OAKMEAD PARKWAY  
SUNNYVALE, CA 94085-4040

EXAMINER

KENDALL, CHUCK O

ART UNIT

PAPER NUMBER

2192

MAIL DATE

DELIVERY MODE

03/20/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/750,395	<b>Applicant(s)</b> SRINIVASAN ET AL.	
	<b>Examiner</b> CHUCK O. KENDALL	<b>Art Unit</b> 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 13-17 and 28 - 35 is/are pending in the application.
- 4a) Of the above claim(s) 1-12, and 18 - 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-17 and 28 - 35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/04/09</u> .                                                | 6) <input type="checkbox"/> Other: _____                          |

**Detailed Action**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/04/09 has been entered.
2. Claims 13 – 17, and 19 – 35 are pending.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 13 – 17 and 19 – 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Circenis.

Regarding claim 1, An apparatus comprising:

a plurality of processors, wherein one of the plurality of processors is operable to cause remaining processors of the plurality of processors to pause execution of a plurality of threads before initiating a frequency calculation thread on the one of the plurality of processor to prevent interrupting the frequency calculation thread (3:63 – 4:55); and

a bus coupling the plurality of processors to each other (3:63 – 4:55).

Regarding claim 14, the apparatus of 13, further comprising a performance monitor counter coupled to each of the plurality of processors to keep track of when the processor is active (1:50 – 67).

Regarding claim 15, the apparatus of 14, the performance monitor counter to provide a count for determining the processor utilization(1:50 – 67).

Regarding claim 16, the apparatus of claim 13, wherein the plurality of processors comprise a plurality of logical processors to execute threads simultaneously (5:20 – 40).

Regarding claim 17, the apparatus of claim 13, wherein execution of the predetermined unit of code causes the remaining processors to pause (4:35 – 55).

Regarding claims 28 and 32, a method comprising:

preparing to initiate a frequency calculation thread on one processor of a plurality of processors in a data processing system, said preparing comprising pausing execution of a plurality of threads on remaining processors of the plurality of processors to prevent interrupting the frequency calculation thread (3:63 – 4:55);

initiating the frequency calculation thread after pausing the execution of the plurality of threads(3:63 – 4:55); and

resuming the execution of the plurality of threads when execution of the frequency calculation thread has been completed (5:20 – 40).

Regarding claims 29 and 33, the method of claim 28, wherein preparing to initiate the frequency calculation thread further comprises:

firing a wait synchronization event from the one processor of the plurality of processors to the remaining processors of the plurality of processors (4:35 – 55); and

waiting for acknowledgement from the remaining processors of the plurality of processors before initiating the frequency calculation thread (4:35 – 55).

Regarding claims 30 and 34, the method of claim 28, wherein the plurality of processors comprise logical processors (5:15 – 40).

Regarding claims 31 and 35, the method of claim 28, wherein the plurality of processors comprise physical processors (4:35 – 55).

### **Correspondence Information**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Kendall whose telephone number is 571-272-3698. The examiner can normally be reached between Monday and Thursday, at 11:00 am - 4:300pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Chuck O Kendall/

Primary Examiner, Art Unit 2192